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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,602	03/23/2001	Mark Lynn Jenson	1327.010US1	6174

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EXAMINER

WINTER, GENTLE E

ART UNIT	PAPER NUMBER
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1746

8

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/816,602

Applicant(s)

JENSON ET AL.

Examiner

Gentle E. Winter

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-- The MAILING DATE of this communication appears n th c ver sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 30-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-29 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☒ Claim(s) 1-12 and 30-58 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant election of Group II without traverse as to groups III-V, is acknowledged.
2. Applicant's election with traverse of Group II as to Group VI in Paper No. 6 is acknowledged. The traversal is on the ground(s) that "both groups are to a shell having a battery." This is not found persuasive because inventions II and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of Group VI has separate utility such as a motor vehicle fender. See MPEP § 806.05(d).
3. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement between groups I and II, the election has been treated as an election without traverse (MPEP § 818.03(a)).
4. The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

1. Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically claim 23 disclosing that the battery is "sputtered on one of the interior surface or exterior surface." The claim is drawn to the apparatus not the method of making the apparatus. Sputtering is a method of manufacture not a structural limitation. The claim is rejected with its base claim.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- a. In Figure 7, the reference sign **714** is missing (page 29, line 9);
- b. In Figure 9A, the reference signs, **922, 926, 928** and **932** are missing (page 42, lines 8, 17, 18 and 22);
- c. In Figure 19A, the reference signs **1110** and **1110'** are missing (page 59, line 18);
- d. In Figure 26A, the reference sign **2320** is not shown (page 72, line 23);
- e. The reference sign **2400** is not shown (page 73, line 27); and
- f. In Figure 28C, the reference sign **2800'** is not shown (page 80, line 20).

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

- a. The reference sign **257C** is not described (Fig. 2C);
- b. The reference sign **16E** is not described (Fig. 16E)
- c. The reference sign **2323** is not described (Fig. 23 and 25A);
- c. The reference sign **2467** is not described (Fig. 24D);
- d. The reference signs **2543** and **2546** are not described (Fig. 25C);
- e. The reference sign **2563** is not described (Fig. 25F);
- f. The reference signs **2518** and **2519** are not described (Fig. 26A);
- g. The reference sign **2791** is not described (Fig. 27L);
- h. The reference sign **2963** is not described (Fig. 29A);

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- i. The reference signs **2966**, **2967** and **2968** are not described (Fig. 29C); and
- j. The reference signs **2914** and **2915** are not described (Fig. 29I).

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “**713**” has been used to designate both an end roll (page 28, line 29) and an assist source (page 29, line 13).

Reference character “**2207**” has been used to designate both an integrated device (page 63, line 26) and a different integrated device (page 64, line 7).

The reference character “**2430**” has been used to designate both a supercapacitor device (page 66, line 8) and an integrated circuit (page 66, line 8).

The reference character “**2540**” has been used to designate an Integrated circuit (page 71, line 8), a lower substrate (page 71, line 11), wires (page 71, line 11), a product package (page 71, line 18) and processed circuits (page 72, line 17).

The reference character “**2660**” has been used to designate both a receiving loop (page 73, line 18) and a layer-deposition system (page 74, line 5).

4. The drawings are objected because for the following informalities:
- a. Figures 15D, 15E and 16D should include reference numbers describing that which is being shown;
 - b. In Figure 15K, the reference sign “**11100**” should be changed to --**1100**--;
 - c. In Figures 16A and 16B, the same reference signs **1390** and **1392** should not be used for both figures (each drawing should be independent);

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- d. In Figure 17, the reference sign **1300** should be deleted because it does not match the description (page 58, lines 8-9);
- e. In Figure 21A, please change the reference signs "**1800**", "**1920**" and "**1930**" to --**1900**--, --**1910**-- and --**1920**--, respectively;
- f. In Figure 21B, please change the reference sign "**1940**" to --**1930**--; and
- g. In Figure 26B, please delete the reference sign "**2460**".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 13-27 is rejected under 35 U.S.C. 102(b) as being anticipated by WO 97/19090 ('090).
2. Claim 13 is drawn to an electrically powered device comprising: a shell; and a battery integrated with the shell. The same is disclosed in the '090 reference which reads on claim 13 as in the following manner, '090 discloses an electrically powered device (circuit board) comprising a shell (the inside surface of a case, see e.g. page 3 second paragraph); and a battery integrated with the shell (integrally formed power cell element 7).
3. As to claim 14, disclosing that the electrically powered device of claim 13 further comprises a trace (need for connecting wires is eliminated, and at page 2 last paragraph

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“electrically conductive surfaces”); and a site adapted to receive an electrically powered component, wherein the battery, the trace and the electrically powered component form a portion of a circuit. See e.g. page 2 paragraph 2, disclosing an cell integrally formed in the circuit.

4. As to claim 15, disclosing that the shell is a portion of an enclosure, the same is disclosed at e.g. page 2 paragraph 2, disclosing that the cell/circuit board in the casing/shell.

5. As to claim 16, disclosing that the battery is formed within the shell, the same is disclosed at page 2 paragraph 2, disclosing that the cell is formed integrally with the circuit board.

6. As to claim 17 further limiting claim 16 and disclosing that the battery is comprised of a plurality of layers. The same is disclosed at *inter alia* page 6, paragraphs 1-3.

7. As to claim 18, further limiting claim 16 and disclosing that contacts associated with the battery, wherein the shell has an interior surface and an exterior surface, wherein the contacts are positioned near one of the interior surface or exterior surface. The same is disclosed at page 6, paragraph 4, disclosing through hole plating.

8. As to claim 19, disclosing further limiting claim 18 and disclosing that there are a plurality of contacts associated with the battery, wherein the contacts can be configured to produce a plurality of different battery hook ups. The same is disclosed at page 7, paragraph 3

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disclosing that there may be a plurality of cells linked in series or in parallel. Each battery includes a plurality of contacts.

9. As to claims 20 and 23, disclosing that the battery is formed on the shell. The same is disclosed at page 2, paragraph 2, disclosing "it is possible to eliminate the requirement for a separate casing, since in effect the circuit performs that function."

10. As to claim 21, further limiting claim 20 and disclosing that the shell has an interior surface and an exterior surface, wherein the battery is formed on one of the interior surface or exterior surface. The same is disclosed at page 2, paragraph 2, disclosing "it is possible to eliminate the requirement for a separate casing, since in effect the circuit performs that function." Continuing that the power supply is readily "accommodated in the available space provided by the board."

11. As to claims 22 and 24, further limiting claim 20 and disclosing that there is a protective layer placed over the battery. The same is disclosed at page 2, paragraph 2, the circuit board will inherently serve this function.

12. As to claim 25, further limiting claim 20 and disclosing a trace and a site adapted to receive an electrically powered component, wherein the battery, the trace and the electrically powered component form a portion of a circuit. The same is disclosed at e.g. page 2 paragraph

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2, disclosing the circuit and the battery. The traces are disclosed in *inter alia* paragraph 3, which continues onto the top of page 3.

13. As to claim 26, further limiting claim 20 and disclosing that the shell has an interior surface and an exterior surface, wherein the battery is formed on the exterior surface of the shell, said shell further comprising electrical contacts for the battery which are positioned near the interior surface of the shell. The same is disclosed at *inter alia* page 2 paragraph 2. The battery is integral with the case and the circuitry is enclosed by the battery/case. Because the circuitry is on the “inside” the battery is, of necessity, on the “outside”.

14. As to claim, 27 further limiting claim 26 and disclosing a trace on the interior surface of the shell and a site positioned on the interior surface of the shell adapted to receive an electrically powered component, wherein the battery, the trace and the electrically powered component form a portion of a circuit, the same is disclosed at *inter alia* page 2 paragraph 3 and page 3 full paragraphs 1-3. The electrical connection to the battery by the conductive surface of the circuit board is disclosed. The circuit board is disclosed to include, at e.g. page 5, paragraph 3 “circuit components (5) are soldered to these tracks to form a circuit.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over '090 as discussed above and United States Patent No. 5,448,110 to Tuttle et al. ('110).

2. Each and every limitation of claims 28 and 29 are identically disclosed in the '090 reference as set forth above, except that the '090 reference apparently fails to explicitly disclose a capacitor. It is noted that the circuit of the '090 reference is believed to include a capacitor and that the disclosed battery would potentially meet the structural requirement for a capacitor, in that both are energy storage mediums. Nonetheless to be rigorous the '110 reference provides the missing element and explicitly provides the motivation for making the combination.

3. As to claims 28 and 29, disclosing that there is a capacitor integrated within the shell the same is disclosed each and every limitation except the capacitor is disclosed in '090, the capacitor is disclosed see e.g. column 8, line 56 *et seq.* The artisan would have been motivated to make the combination for the reason explicitly set forth in '110, namely to accommodate inrush current requirements for IC 64. Specifically, when current demands exceed the capability of battery 60 to supply surge current, for example, due to inductive coupling or battery structure, inrush current is supplied by capacitor 62.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gentle E. Winter whose telephone number is (703) 305-3403.

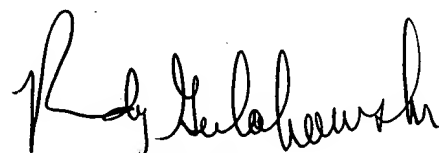
The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (703) 308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. The direct fax number for this examiner is (703) 746-7746.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gentle E. Winter
Examiner
Art Unit 1746

July 8, 2003



RANDY GULAKOWSKI
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